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ABSTRACT

A one-year collaboration research project between San Diego State University and the Sweetwater Union High School District was carried out to test the notion that teachers of limited English-speaking students can effectively carry out research pertinent to them. It included 20 teachers, 16 student teachers assigned to them, two university researchers, and two graduate assistants. It was assumed that teachers of bilingual or limited English-speaking students were themselves the best qualified to determine problems most relevant to research in bilingual settings. A collaborative decision making model was developed, based on three assumptions: (1) parity in decision making for all participants; (2) respect for the unique perspective of each constituency; and (3) equal assumption of responsibility among all participants in the collaborative research and theory development process. The university professors served two roles: to facilitate the establishment of collaborative relationships, and to establish and oversee a process of documentation. A four-step clinical supervision training model was developed and implemented to redefine the relationships between master teachers and student teachers. Because of the time restrictions of the project, the attainment of a full consensus framework for the conduct of a single major research problem was not possible. (BW)

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# WORKING WITH THE PRACTITIONER AS A PARTICIPANT OBSERVER:

# A RESEARCH STRATEGY FOR DESCRIBING THE CULTURAL CLIMATE OF CLASSROOMS

by

Cynthia Darché-Park

and

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Working with the Practitioner as a Participant Observer:
A Research Strategy for Describing the Cultural Climate of Classrooms

by

Cynthia Darché-Park and Jaime Luján

The notion that classroom teachers are incapable of doing important educational research is a bias inherent to research training programs in many traditional research institutions. Many researchers believe that save for a few rare individuals most teachers lack not only the necessary skills but also the proper motivation to formulate and define a researchable question. In this paper we will describe a set of assumptions, goals, and training strategies used to implement a staff development program which tests the notion that teachers of limited English-speaking students can effectively carry out research pertinent to them. This experiment is currently being conducted as a one-year collaborative research project, funded by the National Institute of Education, between San Diego State University and the Sweetwater Union High School District, a large school district in San Diego county adjacent to the United States-Mexico Border. It includes twenty teachers, 16 student teachers assigned to them, two university researchers, and two graduate assistants.

Most teacher training and staff development programs fail to take into account the rich experiential background that teachers bring with them to the training situation. This is particularly true of those programs designed for teachers of bilingual and limited English-speaking students. Most programs focusing on the needs of ethnic minorities lack authenticity. They have been based on an institutional structure which is antithetical to the needs, aspirations and value systems of the populations to be served. An "authentic" process of eliciting information from those to be served rarely, if ever, has occurred. In other words,

basic structures, methods, and ways of doing things have been borrowed wholesale from the majority culture because these ways "fit" into existing institutional frameworks. The "bilingual" or "multicultural" components of the instruction are basically "overlays" on to existing structures and have been expressed in the form of language usage or the adoption of extrinsic cultural symbols. (Cordasco 1975, Zamora, 1972).

The process of authenticating educational programs for ethnic minorities implies many changes the first of which we believe should be to identify problems truly reflective of the populations to be served. We began with the assumption that teachers of bilingual or limited English-speaking students were themselves the best qualified to determine problems most relevant to research in bilingual settings.

We were beset by the problem of choosing a model of staff development which would authentically allow teachers to formulate the relevant research questions which should be asked and simultaneously to meet educational expectancies of two institutions: (1) the university and (2) the secondary school; and two constituencies: (1) university professors and (2) secondary school teachers. Given these restrictions, a problem-solving approach to staff development was chosen which rests on a collaborative decision-making management process. The assumptions underlying the implementation of the collaborative decision making model are:

1) parity in decision making for all participants;

2) respect for the unique perspective of each constituency;

3) equal assumption of responsibility among all participants in the collaborative research and theory development process.

The process of collaboration in this project has two simultaneous cycles. The first occurs between the university and the school district

as educational institutions. The second is that between the university researchers and the teachers in the field. In what follows, we will first describe the nature of the training model and its implementation. Secondly, we will discuss the attainment of collaboration and consensus based on existing institutional frameworks.

## THE TRAINING MODEL

### Theoretical Assumptions

The theoretical underpinnings of this project rest on the pivotal assumption that:

teachers should be the agents of their own professional growth.

The research-training model adapted includes three assumptions designed to create an ambience which provides the emotional support necessary for teachers to be proactive rather than reactive to their instructional situation and problems.

1. Teachers can be encouraged to develop researchable questions by identifying their own strengths and weaknesses in collaboration with their peers. This can be done through:
   a. the systematic observation of other teachers teaching;
   b. analysis of the data collected during the observation of other teachers teaching;
   c. discussion among teachers about the analysis of their findings;
   d. application of their findings to solve instructional problems;
   e. modification of solutions through trial and retest of their hypothesis.
2. Involvement in the process of carrying out instructional research:
   a. enables teachers to perceive the strengths and weaknesses of other teachers during the instructional process;
   b. allows the teacher to identify those teacher behaviors which consistently work well during the instructional process;
   c. makes teachers capable of solving their own problems and

acting as agents of their own change;

d. makes teachers more capable of communicating solutions to problems to their colleagues.

3. University faculty and classroom teachers collaborate in seeking strategies to find solutions to teachers' problems.

The role of university faculty in this process has two focal points: The first is to facilitate the establishment of COLLABORATIVE or COLLEGIAL RELATIONSHIPS--first among the teachers as a group and secondly between the individual teachers and the student teachers assigned to them. COLLABORATIVE or COLLEGIAL RELATIONSHIPS refers to a climate of cooperation and a style of research-like behavior which the professors and the teachers attempt to create and perpetuate during the entire time that the research project is underway. The establishment of collegial relationships involves building and maintaining trust, credibility, and reciprocity in relationships among teachers, teacher educators, district evaluation teams, and others involved in the project.

The second pivotal role of University professors is to establish and oversee a process of DOCUMENTATION. The purpose of documentation is to set up a systematic method of collecting evidence, of authenticating facts, and verifying claims and opinions in order to support inferences drawn from evidence.

Student teachers have been assigned to work with project teachers for five reasons:

a. We assumed that observation of relative novices in the field would allow project teachers to identify basic instructional problems quickly and easily.

b. Project teachers could gain needed practice in systematic observation by first observing student teachers before going into the field to observe their peers.

c. Master Teachers would be put into a process of examining their

own personalities, teaching styles, and beliefs, relating to instruction, as they attempt the very difficult task of trying to help student teachers solve instructional problems in bilingual classrooms.

d. Student teachers, once underway, would allow the Master Teacher some release time to reflect on his/her research problem and to learn skills to find solutions to these problems.

e. University professors, working closely with both master teachers and student teachers, would be able to collect ethnographic data about the needs of bilingual teachers in the field relevant to preservice bilingual teacher training.

Training Strategy and its Implementation

The overall discovery model of learning rests on a 12 step process outlined in Figure 1.

Notice that the processes of Collaboration and Documentation continue throughout the total life of the project. The steps within the model depict a systematic approach to the discovery of solutions to the "problems" or questions identified for study. This figure represents an idealized heuristic for the doing of research which also guides the training process of the teachers. Steps 1. Entry, 2. Statement of hypotheses and selection of emphasis, 3. Ethnomethodology and observation training were initially covered during a 32 hour workshop held the week before school began in August 1980. This workshop was conducted on site at the district offices.

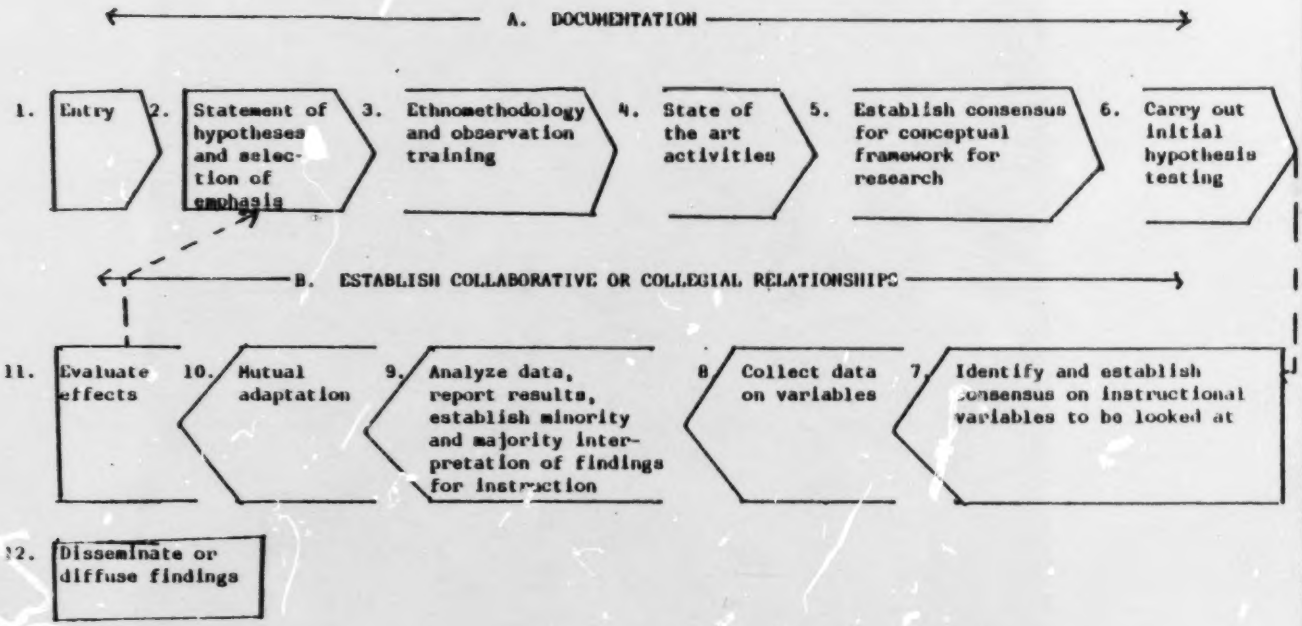

A. DOCUMENTATION
1. Entry
2. Statement of hypotheses and selection of emphasis
3. Ethnomethodology and observation training
4. State of the art activities
5. Establish consensus for conceptual framework for research
6. Carry out initial hypothesis testing
B. ESTABLISH COLLABORATIVE OR COLLEGIAL RELATIONSHIPS
11. Evaluate effects
10. Mutual adaptation
9. Analyze data, report results, establish minority and majority interpretation of findings for instruction
8. Collect data on variables
7. Identify and establish consensus on instructional variables to be looked at
12. Disseminate or diffuse findings

Figure 1. A consensus collaborative research model for adaptation of research findings.

The initial training of the teacher/researchers used the clinical supervision method developed by Boyan and Copeland (1978). It was chosen because:

a. the communicative style inherent in this training is compatible with the 3 basic assumptions of collaboration;

b. it is practically relevant to teachers in their new roles as teacher trainers;

c. it incorporates within it strategies and skills necessary for undertaking educational research.

This training method focuses on developing effective interpersonal relationships, clear communication, problem definition, systematic classroom observation and analysis as well as objective feedback on the student teacher's teaching performance. The idea was to enable participants to develop many of the same skills needed to later carry out an actual research project through a process of transfer.

The strategy involved is comprised of four sequential steps and their concurrent skills.

[See "Clinical Supervision Training Model" on following page]

Within these four steps teachers practice skills directly related to experimental or quasi-experimental educational research. They are:

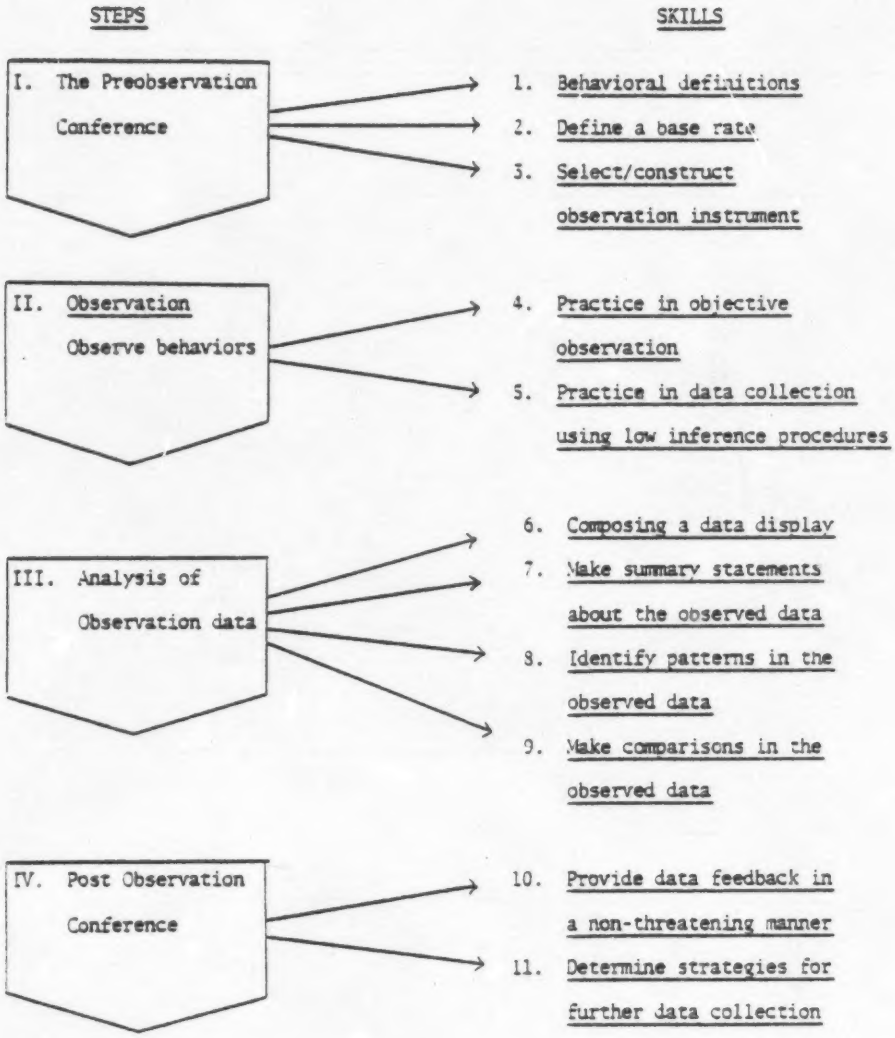
Step I:

a. practice in defining the instructional problem of the student teacher in behaviorally observable terms. This process is the same as that known in research as "operationalizing variables" and defining the problem through generating testable hypothesis;

b. setting a base rate or criterion. This is the process of suggesting desirable behaviors or solutions to solve the

Figure 2

CLINICAL SUPERVISION TRAINING MODEL


STEPS
SKILLS
I. The Preobservation Conference
1. Behavioral definitions
2. Define a base rate
3. Select/construct observation instrument
II. Observation
Observe behaviors
4. Practice in objective observation
5. Practice in data collection using low inference procedures
III. Analysis of Observation data
6. Composing a data display
7. Make summary statements about the observed data
8. Identify patterns in the observed data
9. Make comparisons in the observed data
IV. Post Observation Conference
10. Provide data feedback in a non-threatening manner
11. Determine strategies for further data collection

problem outlined in "a" above and aiming for a level of change of these behaviors if criterion is not reached;

c. selection or construction of an observation instrument. This is the process of finding or constructing checklists, or other instruments for the purpose of objectively mirroring specific behaviors in the classroom related to the instructional problem defined in "a" above. This process in educational research is more general and includes such instruments as achievement tests, survey questionnaires, attitudinal questionnaires, etc.

Step II: The process of observation itself is one which requires practice. Teachers had the opportunity to observe classroom interaction on film and to observe the same situation using similar instruments. Problems of interrater reliability were discovered through this process.

Step III: Analysis consists of practice analyzing data collected by observation and to interpret it for purposes of maintaining or identifying classroom behaviors which should be changed. This is the process in educational research of statistically analyzing numerical data and relating it to the original hypothesis tested.

Step IV: Post observation conference gave Project Teachers the practice of relating the results of observation analysis and interpretation to the student teacher in simulation with the objective of determining strategies for improvement of

student teacher interaction. This step is an analog of the researcher's writing and publishing the results of his/her research in professional journals and the inclusion of further research needed on a problem.

Building Collaborative Relationships

During the initial phases of the project when the twenty teachers were undergoing the clinical supervision training, the consensus model was explained to them in detail. The major purposes of the clinical supervision training were:

1. to give the teachers practice in working with another person in the improvement of the instructional process. They worked with each other in preparation for working with a student teacher;
2. the building of trust and communication skills among the teachers as a group and with the professors;
3. to give the teachers practice in the selection and description of researchable questions;
4. practicing construction of classroom observation instruments and collection of data.

Working Toward Consensus

As part of the collaborative research model for staff development, the team of two professors and twenty secondary school teachers attempted to come to an overall consensus regarding the topics to be researched. This was done through biweekly group discussions about research questions interesting to the teachers. The teachers requested that copies of the proposed model be placed at each of the six school sites so that they could better familiarize themselves with the overall project plan. They also wished to get clues about pertinent questions which should be asked.

The university professors visited each school site at least once

per week to supervise student teachers; do simultaneous observations of student teachers together with the master teachers; coach master teachers in the observation process; practice reaching interrater reliability during classroom observations; and to discuss master teacher's research topics. At schools with more than one project teacher, an attempt was made to meet with all of them in a small group.

These activities in the schools has not been perceived as being disruptive inasmuch as the professors were normally expected to be at the schools in their usual role as supervisors of student teachers. Project activities were thus unobtrusively integrated into the normal flow of school activities.

Characteristics of Project Teachers Selected

The process of participant selection when working across institutions is usually very time-consuming. For some programs this process has taken up to six months, particularly when start-up dates of the funding agency do not coincide with school district and university academic calendar years. Because this project was originally scheduled to be funded in July 1980, it was important to begin the process of teacher selection in April 1980 before teachers left for summer vacation. This is particularly true since initial training was to begin in August before classes began. During April through June 1980, university professors met with principals, assistant principals and counselors at each site to explain the project and to gain their acceptance of the project for their teachers. Follow-up meetings were held with interested teachers. The teacher role and responsibilities in the project were thoroughly explained and outlined in writing. This process yielded a list of 17 teachers in four schools who were willing to make a commitment to the

project. The essential criteria for acceptance into the project were three fold:

a) the teacher had to be willing to make a year-long commitment to the project;

b) the teacher had to express interest in doing research;

c) the teacher had to be working with limited English-speaking students.

Because there was a delay in notification of funding, District personnel and University professors made the decision August 4, 1980 to begin the project on district and university funds. Of the 17 teachers originally committed to the project, six were still available for training in August. Of the 11 who could not continue, four had a change in status (e.g. transferred to other school, promoted to counselor, took a leave of absence, etc.), five felt the project too strenuous given other commitments, and two withdrew because of a nonsupportive principal. During the first part of August, additional intensive recruitment of teachers was undertaken. All teachers recorded as being present at any of the orientation meetings were contacted. Seven of them who had not been ready to make a commitment in June agreed to participate. An additional three teachers transferred into the collaborative research project from an onsite Masters program. Four more came from schools or assignments not originally targeted for the project. These teachers were allowed to participate because they had had experience doing research; they were bilingual and were working with bilingual or limited English-speaking students.

Through this process, twenty teachers from six schools were selected. Table I shows the subject areas, bilingual certification and years of experience for each of the project teachers.

Table I

Subject Area, Bilingual Certification, and Years of Experience for Participating Teachers

| Subject Area | Number of Participants | Bilingual Certification | Years of Experience 1-3, 4-9, 10 or more | | |
|---|---|---|---|---|---|
| ESL | 4 | 4 | 2 | 1 | 1 |
| Math | 4 | 2 | 0 | 2 | 2 |
| Social Studies | 7 | 6 | 2 | 1 | 4 |
| Business | 1 | 0 | 0 | 1 | 0 |
| Spanish | 2 | 2 | 1 | 1 | 0 |
| Science | 1 | 0 | 0 | 0 | 1 |
| Tagalog | 1 | 1 | 0 | 1 | 0 |
| Total | 20 | 15 | 5 | 7 | 8 |

Of the twenty teachers who were selected to participate in the program, six already had Masters Degrees and four of these were already at the top of the Salary Scale. At least two of the teachers in the project hold Phi Beta Kappa Keys and two are former Fulbright Scholars.

Of the twenty participating teachers, fifteen hold bilingual certification, five have 1 to 3 years of teaching experience, seven have 4 to 9 years of experience, and eight have 10 or more years of teaching experience. Seven subject areas are represented in the group. Two of the five teachers with 1-3 years of experience work as substitute teachers for the school district. Three of the teachers are second-year teachers. Half of the teachers with ten or more years of experience had, in previous years, supervised student teachers. The other four in this category had never had or requested a student teacher. Two of the regular classroom teachers in the project could not be assigned student teachers because we were unable to match student teachers with Master Teachers for one of the math teachers and for the Tagalog teacher.

In summary, the process of selection produced a cadre of twenty teachers across six school sites. In no case does the number of teachers

at any site compose a "critical mass." Teachers vary greatly in years of teaching experience and in experience with research and innovative programs within the years of experience category.

## ATTAINMENT OF COLLABORATION

The notion of collaboration among teachers working toward objectives in the educational enterprise is not a new one. Team teaching is an example of a type of collaboration advocated in several bilingual models of instruction. In this project two types of collaboration were being advocated simultaneously. The first was that between master teacher and student teacher in which the master teacher was to act as a facilitator and emotional support for problem solving on the part of the student teacher rather than as a critic or evaluator. The second process of collaboration was that among the teachers themselves in their attempts to solve problems through consensus decision making and doing research on identified problems. Our descriptive research in these areas rests on the following questions:

(1) To what extent did teachers implement the clinical supervision model?

(2) What were the reasons the clinical supervision model either succeeded or failed in the implementation stage?

(3) To what extent did the clinical supervision model act as a base for transfer of skills to the research questions identified?

Insights about the nature of the answers to these questions are based on our weekly observations of the relationships which developed between master teacher and student teacher during the entire first semester, records of the interaction between master teacher and student teacher during the past observation conferences; and ethnographic interviews of both student teacher and master teacher separately during the course of the semester.

During the first four weeks of implementation we noticed that no master teachers had begun to implement the first step of the process. On analysis of our data at that point we hypothesized that the student teachers, on initial entry into teaching, were not ready to cooperate in Step I of the procedure. The clinical training model has as its underlying assumption the notion that the teacher in training will freely discuss his/her problem in instruction with the master teacher or supervisor. University professors, acting as supervisors of student teachers, observed that:

a. Three student teachers were having problems with such things as pacing of the class, classroom control and adequate lesson planning, but that the student teachers in question did not themselves realize the problems, though the master teachers did.

b. Even when student teachers did realize they had a problem, they tended to discuss it with other teachers in the school, rather than with the master teacher or university supervisor.

c. All master teachers were reluctant to begin observations until student teachers had come to them with a problem.

Thus, implementation of procedures learned in the clinical observation training were not being utilized.

The university professors initiated action by beginning observations using an anecdotal method even though no problem had been expressed by the student teacher. Then both the university supervisor and the master teacher would sit in on the post observation conference. In this process, university professors were acting as models for master teachers by demonstrating roles for interacting with student teachers using the objective data gathered from the observation process. After the first three weeks of this process the professors, by observing student teachers teach and by observing the relationship between master teachers and student

teachers, redesigned the supervision model to include some important preliminary steps. Observations were made using the anecdotal method of recording classroom interaction. In this method, the observer records as much of the student-teacher interaction as possible. The time at which things are happening is recorded resulting in a sequential descriptive record of the teachers interaction with the class. It is important that no evaluations are made using this method; judgmental language is avoided. The goal is to mirror the student-teacher interaction and record this on paper. Much of the focus of these observations was on student behavior.

The flow chart displayed in Figure 3 was developed to assist teachers in clarifying the procedures in the revised clinical supervision model. Effective length of time for each observation appears to be about twenty minutes for most classrooms.

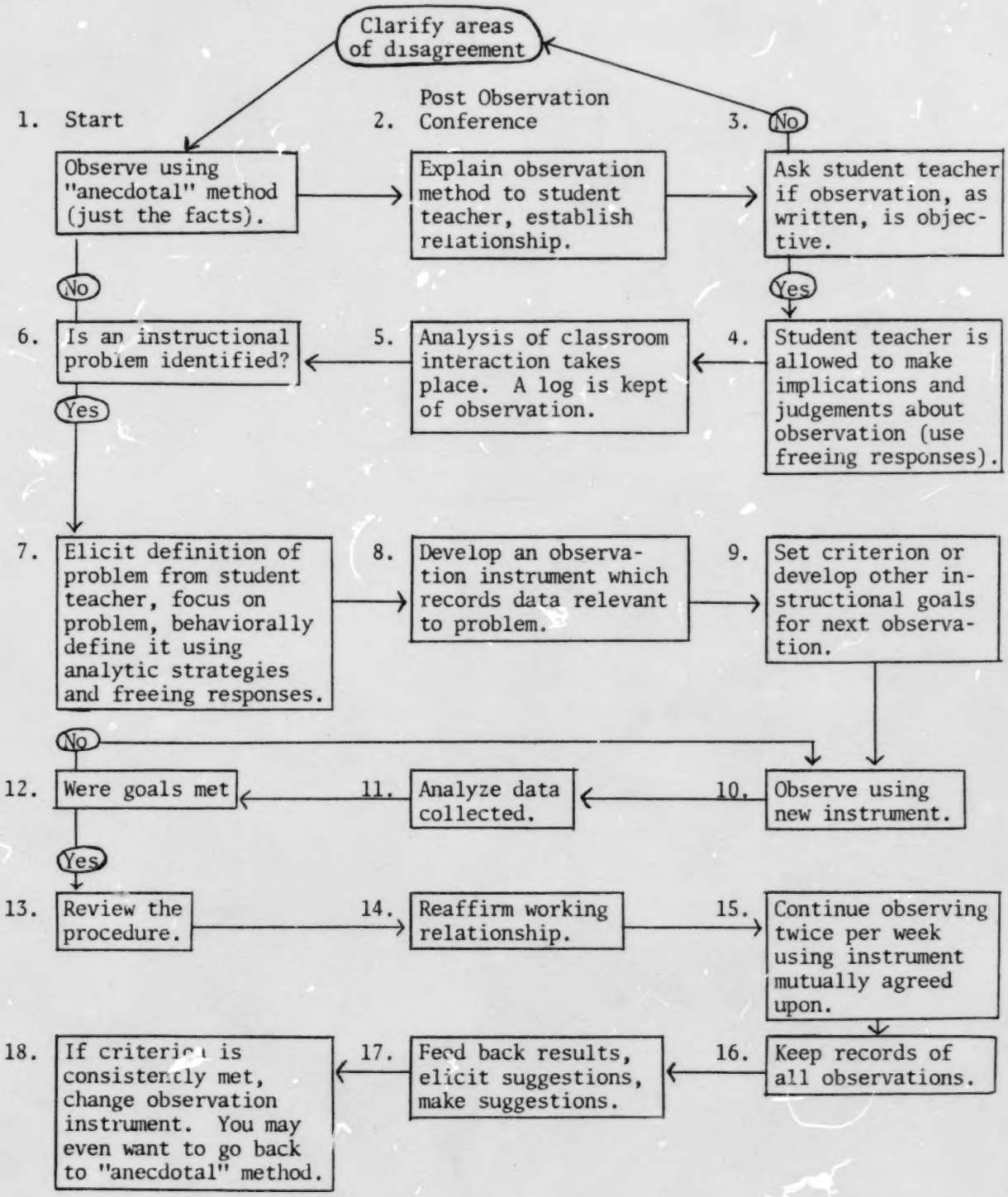
Readiness of teachers to Implement Clinical Supervision

When the revised model for clinical supervision was presented toward the end of September, 1980, several things had happened. First, two second-year teachers had been having difficulties adjusting to the new role of master teacher. In the first case difficulties adjusting to a role had been aggravated by a nonsupportive principal. In the second case, the master teacher was not able to isolate herself from a tendency to make judgments about her student teacher's performance, this being contrary to the model. This teacher was not able to simply record the facts objectively and allow the student teacher to make the judgments. Instead, this teacher identified for the student teacher all problems she felt the student teacher was having and offered many solutions for the problems she had identified, rather than eliciting the problems from

the student teacher. For these two second-year teachers, it was necessary to reassign the student teacher to another more experienced teacher. Second, one of the more experienced teachers had dropped out of the project because of time commitments to a new project.

FIGURE 3

Revised Clinical Observation Model


Clarify areas of disagreement
1. Start
2. Post Observation Conference
3. No
Observe using "anecdotal" method (just the facts).
Explain observation method to student teacher, establish relationship.
Ask student teacher if observation, as written, is objective.
No
Yes
6. Is an instructional problem identified?
5. Analysis of classroom interaction takes place. A log is kept of observation.
4. Student teacher is allowed to make implications and judgements about observation (use freeing responses).
Yes
7. Elicit definition of problem from student teacher, focus on problem, behaviorally define it using analytic strategies and freeing responses.
8. Develop an observation instrument which records data relevant to problem.
9. Set criterion or develop other instructional goals for next observation.
No
12. Were goals met
11. Analyze data collected.
10. Observe using new instrument.
Yes
13. Review the procedure.
14. Reaffirm working relationship.
15. Continue observing twice per week using instrument mutually agreed upon.
18. If criterion is consistently met, change observation instrument. You may even want to go back to "anecdotal" method.
17. Feed back results, elicit suggestions, make suggestions.
16. Keep records of all observations.

Implementation of the process shown in Figure 3 succeeded in getting all project teachers started in the observation process. However, the actual hammering out of mutually agreed upon instructional problems between master teacher and student teacher and the production of observation instruments by the master teachers was singularly unimpressive. Of the sixteen teachers in the project only three ever made it to the collection of data through instrumentation. In attempting to discover the possible reasons for the less than adequate implementation of the model we have formed the following hypotheses:

1) The Boyan and Copeland Model is theoretically and practically inadequate to promote collaborative relationships among teachers;

2) Even if this model is revised and adopted "mistakes" in the "match" between master teacher and student teacher will result in less than a collaborative relationship.

Theoretical and Practical Inadequacy of Boyan and Copeland Model

From the analysis and reanalysis of the observational and interview data we have gathered vis-a-vis the characteristics of the model we have tentatively hypothesized that the Boyan and Copeland Model is inadequate because it is an incomplete attempt to simultaneously combine assumptions and communication techniques based on ethnographic methodologies with techniques and procedures for research based on psycho and sociometric techniques. We tentatively hold that this incomplete eclecticism may cause confusion among the teachers trying to implement the entire strategy.

Secondly, we hypothesize that the strategy becomes unworkable because student teachers expect to be evaluated given the university requirements of teacher training. Unless they learn, through training, their part of the communications "script" the collaborative process cannot really begin.

Thirdly, we suspect that collaboration between master teacher/student teacher, given any strategy, will only occur when there is a "match" between the two. We did not consider this problem in our original documentation plan for the program so we cannot say what the crucial elements of the "match" might be. Tentatively, we think it may have something to do with the participants' attitudes or perceptions about what good schooling should be, what the proper role of the teacher should be vis-a-vis the students, and what constitutes standards of excellence for student evaluation.

In spite of these difficulties, teacher evaluation of the clinical training process averaged between 4.7-4.9 on a three factor instrument (Scale 1-5). All teachers with past experience as master teachers reported they wished they would have had such training prior to their first experience with a student teacher. All participants said they would recommend the training to their colleagues as preparation for becoming a master teacher.

Though most teachers did not get to the point of designing instruments for student teacher feedback, they all succeeded in giving feedback through the anecdotal method. Fourteen of the sixteen master teachers were very receptive to the feedback given them in this manner. Only one of the teachers was reluctant to receive a student teacher for the following semester.

Did the clinical supervision training transfer to the doing of research? Did it aid the establishment of collaboration among the teacher/researchers? Insights into these questions will be integrated within our discussion of the attainment of consensus among the group.

## ATTAINMENT OF CONSENSUS

By the middle of November, 1980 we realized that given the time restrictions of the project the attainment of a full consensus framework for the conduct of a single major research problem concerning the nature of bilingual/multicultural instruction in the District was not possible. Instead individual teachers or small groups of them would produce a series of mini-studies relating to limited English-speaking students.

Insights as to why overall consensus was not achieved may be related to the following facts:

> Thirteen of the twenty teachers had a very difficult time selecting a researchable question. One of the restrictions most often cited was lack of enough time to reflect adequately on the problem.
>
> There was a tendency on the part of three teachers to lean on the examples of research questions illustrated in the proposal itself.
>
> Three of the teachers who identified separate research questions attempted, to no avail, to interest some of the other project teachers in their research. Then, all subsequently recruited teachers from outside the project as partners in their research.
>
> Four teachers have shown some reluctance to collaborate. One major difficulty to collaboration was differences among teachers in subject area and knowledge background.
>
> Another major difficulty was communication on a regular basis across school sites. Collaborative research teams have only developed among project teachers working in the same school.

All of these things tended to work against the development of a total group consensus framework for carrying out research. Instead, teachers selected research topics in groups of three, dyads, or as individuals.

The following descriptions show the nature of the problems researched at each school site. At one high school, three teachers in the

subject areas Math, Government, and Social Studies identified their research question within the first two months of the project. This team was formulated early because all three teachers had strong feelings that "their school" was characterized as a "remedial school" and that many students in the school were erroneously labeled as "remedial." In addition, one of the teachers shows strong leadership skills. They will collect empirical data reflecting the attitudes of teachers, administrators and students about their "school climate." This team was able to meet regularly during third period.

At another school, three teachers in the subject areas Math, Spanish, and Social Studies had a difficult time in formulating a researchable question. They were able to agree on the general nature of their research problem within the first month of the project, but have had difficulty coming to an agreement about how the research is to be done. Their research question contains three parts: 1) a description of student motivation, 2) a description of teacher attitudes, and 3) a description of parental attitudes as they relate to student success and exit from the bilingual program. They have chosen a combination of the ethnographic interview and psychometric techniques as the methodology for their study.

At a third school with four teachers, each participant is working on a separate research topic. One teacher had her project clearly defined upon entry into the project and had already done some work in the development of a language test for the placement of limited English-speaking students, another is the only business teacher in the project and is interested in how teacher leadership style affects learning, the third teacher initially found it difficult to collaborate with others in

the project but another of the more experienced teachers at another school finally was able to interest her in working together on some aspects of individualization. However, they are working on separate research projects. A fourth teacher at this school dropped out of the project shortly after completing the first phase because of time constraints.

Five teachers at another site have been meeting regularly throughout the implementation phase of the project. One teacher was looking at Adlerian theory and how it affects school achievement for Mexican American students, however, he dropped out of the project due to family illness. The others are working on separate projects. These projects deal with family background influences on individualization, the selection process of Mexican American students for college prep Math and Science courses, and the process of acculturation among recently-arrived Filipino students. All teachers at this site have chosen an ethnographic methodology.

In the two schools that have only one project participant, the teachers are working on individual projects. One of them recruited another teacher to help her study the relationship between different modes of instruction for bilingual students and achievement. The other is experimenting with differential genres of writing as a means to enhance motivation and achievement of junior high school students in Social Studies.

Only one teacher selected a research problem directly related to student/teacher interaction, even though not only the clinical supervision but also the development of the master teacher-student teacher relationship strongly emphasized this. Instead, the rest of the teachers selected problems relating directly to institutional organization within the school and/or home background variables of the students which teachers feel

prevent students from achieving academically.

Lastly, two teachers are conducting action research through a program they developed to train parents to observe bilingual classrooms.

The questions teachers have chosen to ask regarding bilingual/multicultural education in their schools bear only slight resemblance to those posited in the project proposal. These bilingual teachers are more concerned with the nature of the family and its influence on the success of current educational practices (e.g. individualization), the attitudes of teachers toward the ethnic student, the practice of student selection and placement (e.g. for ESL classes and college prep Math/Science) than in the interaction between students and teacher within individual classrooms. For most of these questions ethnographic rather than psychometric or experimental paradigms have been chosen. Under these conditions the question of transfer of "research" skills from the clinical supervision training is irrelevant because such skills are for the most part irrelevant to the types of questions the teachers are asking.

Only four of the teachers have really refused to collaborate. Three even recruited collaborators when none could be found within the project group.

Total collaboration has proved to be unfeasible because of situations beyond the participants' control such as wide dispersion of teachers across schools, the heterogeneity of the participants in subject matter interests, teaching experience and past experience doing research.

Perhaps, the most important outcome of this research project is the documentation of the questions which bilingual teachers themselves deem important areas for research. Of equal importance will be the implications for bilingual pre service teacher training coming out of the difficulties and successes documented for the master teacher/student teacher relationship.